CLAIMS

We claim:

1. A crystalline 7β-[(Z)-2-(2-amino-4-thiazolyl)-2-hydroxyiminoacetamido]-3-vinyl-3-cephem-4-carboxylic acid (Crystal B of Cefdinir) which shows peaks in its powder X-ray diffraction pattern at the diffraction angles of about 5.8±0.2, 11.7±0.2, 16.1±0.2, 18.6±0.2, 20.9±0.2, 22.2±0.2, 24.4±0.2 and 25.6±0.2 two theta degrees.

2. Crystalline substance of claim 1 which is characterized by infrared absorption spectrum pattern having characteristic peaks at approximately 1017, 1049, 1121, 1134, 1191, 1428, 1545, 1613, 1667, 1780, 3295 and 3595 Cm^{-1}.

3. Crystalline substance of claim 1, which contains water in the range of 5.5 to 7.0% by weight.

4. A process for preparing crystalline 7β-[(Z)-2-(2-amino-4-thiazolyl)-2 hydroxyiminoacetamido]-3-vinyl-3-cephem-4-carboxylic acid (Crystal B of cefdinir) which comprises the steps of:

Reacting crystals A of cefdinir in water with trifluoroacetic acid at 35-40°C to form cefdinir trifluoroacetic acid salt,

optionally isolating the said cefdinir.trifluoroacetic acid salt,

neutralizing the said cefdinir.trifluoroacetic acid salt by treatment with a base in water at a temperature between 0°C to 30°C,

isolating crystal B of cefdinir by filtration.

5. The process according to claim 4, wherein the base used for neutralization is preferably ammonia.

6. The process according to claim 4, wherein, the said neutralization step is conducted at a temperature range of 0-30°C and preferably at 20-25°C.

7. A pharmaceutical composition comprising a therapeutically effective amount of Crystal B of cefdinir and a pharmaceutically acceptable carrier.